REMARKS

Claims 1, 3-8, 13, 14 16 and 18 currently appear in this application. The Office Action of July 30, 2007, has been carefully studied. These claims define novel and unobvious subject matter under Sections 102 and 103 of 35 U.S.C., and therefore should be allowed. Applicant respectfully requests favorable reconsideration, entry of the present amendment, and formal allowance of the claims.

Amendments to Claim 1

Claim 1 has been amended to incorporate hereinto the subject matter of claim 2. Claim 1 has been further amended by introducing the limitation, "(i) al the materials used in said hole injection layer, said hole transportation layer, said luminescent layer, and said electron transportation layer have a glass transition temperature (Tg) of 120°C o higher." Support for this limitation can be found in the specification as filed at page 32, lines 8-15. Moreover, claim 1 has been amended to define "ambient temperature" to be in the range of -40 to 1290°C. Support for this amendment can be found in the specification at pages 32, lines 16-18 and page 33, lines 2-8.

Art Rejections

Claims 1-7, 10-13, 16 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobori et al., US 6,295,039 in view of Satsuki et al., US 2005/0275341 in further view of Van Slyke et al., *Appl. Phys. Lett.* **69(15)** (1996) p. 2160-2162. The Examiner states that Kobori teaches light emitting layers having a mixture of hole transporting material represented by general formula (II), electron transporting material, such as anthracene, and coumarin derivatives as light emitting dopant, but fails to teach specifically a coumarin derivative having a glass transition temperature over 150°C. The Examiner further states, however, that Satsuki discloses coumarin derivatives which fall within the scope of the coumarin derivatives as defined in claim 2, and Van Slyke is said to teach the improvement in stability in a device by adding CuPc (copper phthalocyanine) as a hole injection contact layer. Based upon the disclosures and teachings in the cited prior art documents, the Examiner allege that it would have been obvious to one of ordinary skill in the art to conceive the claimed organic electroluminescent device. This rejection is respectfully traversed.

As defined in claim 1 as amended, the claimed organic electroluminescent device has features (i) to (v). In particular, newly introduced feature (i), "all the materials used in said hole injection layer, said hole transportation layer, said luminescent layer and said electron transportation layer have a glass transition temperature (Tg) of 120°C or higher" and newly defined "ambient temperature in the range of -40° to 120°C" in feature (v) are crucial in the case in which an organic electroluminescent device of the claimed invention is used in a display panel for cars and other vehicles. As described in the specification at pages 32-33, a display panel equipped in vehicles is inevitably exposed to high temperatures conditions. If the materials used in the layer of the organic electroluminescent device have relatively low glass transition temperatures, then the materials in amorphous state may be converted into crystals under conditions of elevated temperatures. As a result, unevenness of the surface of the layers may increase and cause leak of electric current. Similarly, if the variation in diffraction plead accompanied by heating eh organic electroluminescent device at ambient temperature in the range of -40 to 120°C is not maintained within a relatively small range in terms of diffraction peaks as determined by X-ray diffraction to the copper phthalocyanine, then the adhesiveness of the copper

phthalocyanine membrane may be weakened and short-circuit as well as electric leakage may occur.

To avoid these disadvantages, claim 1 requires features (i) and (v). In other words, the herein claimed organic electroluminescent device is suitable for use in cars and other vehicles.

In contrast thereto, none of Kobori, Satsuki or Van Slyke teaches features (i) and (v). For example, Van Slyke discloses an organic electroluminescent device that has a hole transporting layer consisting of NPB. However, it should be noted that he glass transition temperature (Tg) of NPB is 95°C (please see page 2162, left column, lines 10-19), which is much less than 120°C. In this regard, the organic electroluminescent device of Van Slyke does not satisfy feature (i) of claim 1. The glass transition temperature of 95°C is too low to be useful in a vehicle, the interior of which can reach extremely high temperatures when the vehicle is in the sun in a hot climate.

Claims 8 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobori in view of Satsuki in further view of Van Slyke and in further view of Inoue et al., US 5,635,308. This rejection is respectfully traversed.

Inoue adds nothing to Kobori, Satsuki and Van Slyke, even though the phenylanthracene compound taught by Inoue has

a glass transition temperature of 120°C or higher. The Examiner has given no reason that one skilled in the art would use the Inoue compound in the Kobori light emitting layers.

Claims 1-7, 10-13, 16 and 18 are rejected under 35 U.S.C. 103(a)as being unpatentable over Kobori et al. in view of Fujiwara et al., *Journal of Photopolymer Science and Technology* **Vol. 14, No. 2** (2002), p. 237-238 in further view of Van Slyke. This rejection is respectfully traversed.

The Examiner alleges that Fujiwara discloses coumarin derivatives that satisfy the feature (iii) of claim 1. However, it is believed that it would have been difficult to replace the coumarin derivative in the Kobori device with the coumarin derivatives disclosed in Fujiwara with reasonable expectation of good results, because the coumarin derivative in Kobori comprises only one coumarin skeleton and is used in combination with quinacridone compounds represented by general formula II or styrylamine compounds represented by general formula III. The coumarin derivatives disclosed in Fujiwara have two coumarin skeletons, and there is no indication that these would be the equivalent of the single coumarin skeleton in combination with a quinacridone or styrylamine.

Fujiwara teaches nothing about features (i) and (v), which are essential features of the device claimed herein.

Claims 8 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobori in view of Fujiwara in further view of Van Slyke and in further view of Inoue. This rejection is respectfully traversed.

As noted above, neither Kobori, Fujiwara, Van Slyke or Inoue teaches anything about features (i) and (v) which are critical to the presently claimed device. Therefore, it is believed that claims 8 and 14 are not obvious in view of Kobori, Fujiwara, Van Slyke, and Inoue.

In view of the above, it is respectfully submitted that the claims are now in condition for allowance, and favorable action thereon is earnestly solicited.

Respectfully submitted,

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